

Title (en)  
Disposable safety syringe.

Title (de)  
Sicherheits-Wegwerfspritze.

Title (fr)  
Seringue de sécurité à usage unique.

Publication  
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Application  
**EP 89110840 A 19890615**

Priority  
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Abstract (en)  
According to the invention, the disposable safety syringe comprises means (18) for retaining the empty needle (17) in a use position, which means are disengageably actable upon a bushing (16) for mounting a needle, the which bushing is retractably inserted into the needle-holder head (12) of the syringe body (11); means (13.4/16.5) for the inseparable coupling between the bushing (16) and the plunger (13) of the syringe, achieving this coupling at the end of the stage for injecting the liquid contained in the syringe body; means (10) for disengaging the retaining means (18) from the bushing (16), driven by the plunger and achieving disengagement at the end of the stage for injecting the liquid contained in the syringe body, substantially in step with the action for inseparable coupling between bushing (16) and plunger (13), in addition to means (10.1) for automatically returning the plunger to a retracted position within this syringe body at the end of the stage for injecting the liquid contained in the syringe body, functioning automatically upon cessation of the manual action exerted on the plunger, in such a way that the plunger is automatically retracted into the syringe body, and in a manner integral to and inseparable from the plunger, the empty needle and its mounting bushing are likewise automatically retracted into a safety position in the syringe body.

IPC 1-7  
**A61M 5/32**

IPC 8 full level  
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Citation (search report)  
• [A] US 4675005 A 19870623 - DELUCCIA JAMES [US]  
• [A] US 4710170 A 19871201 - HABER TERRY M [US], et al  
• [A] US 4026287 A 19770531 - HALLER IRENE  
• [A] DE 8529315 U1 19860417  
• [A] US 4612010 A 19860916 - HAMACHER EDWARD N [US], et al  
• [A] EP 0144483 A2 19850619 - VETTER & CO APOTHEKER [DE]

Cited by  
US5401246A; US5378240A; US5328484A; GB2239805A; EP0567510A4; US5478321A; US5338304A; AU685751B2; AU655559B2; SG86295A1; US5279580A; US5098390A; US5520649A; US5462531A; US5336198A; FR2658724A1; EP1879635A4; EP0498376A1; EP0480862A1; EP0962230A3; US5531694A; US5152750A; AU657885B2; US5370619A; US5415638A; US5112318A; US5030208A; EP1549365A4; US8021333B2; US9539399B2; US6183464B1; US6117113A; US6033386A; US5716341A; AU691123B2; US5788672A; US5879339A; US5122124A; US5017187A; WO9112841A1; WO9325257A1; WO2004082747A1; WO9222339A1; WO9103269A1; WO9858694A1; WO9220385A1; WO9853867A1; US6342045B1; US6878131B2; US6344031B1; WO9506490A1; WO9318810A1; WO9205821A3; WO9011099A1; WO9211883A1; WO9221389A1; WO9108788A1; WO9104065A1; WO9107198A1; WO2013009166A1

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